

### **Remarks**

Claims 1-19 are pending in the application. Claims 7, 13, and 15-17 are indicated as having allowable subject matter. The specification has been amended. The abstract has been amended. The drawings have been amended. Claims 1, 3, 5, 8, 11, 12, 16, and 18 have been amended. Claims 6-7 and 9 have been cancelled. Reconsideration and re-examination of the application is respectfully requested for the reasons set forth herein.

1. The specification has been amended to correctly identify the figure associated with the corresponding description. The abstract has been amended to better define that which applicant regards as the invention. Figure 8 of the drawings has been amended with changes to the drawing shown in red to identify the arm 124 of the terminal 103 with the reference character 124 as described in the specification. Approval of the amendments to the specification, abstract, and the drawings is respectfully requested.

2. Claims 8, 11-12, and 18 have been amended to correct typographical and grammatical errors and to clarify that which Applicants regard as the invention. Re-examination of these claims is respectfully requested.

3. The Examiner has objected to claims 3, 5, 16, and 17 because of several informalities. Specifically, the Examiner objected to claim 16 because the language “a recesses” in line 3 should be “recesses” and claims 3 and 5 because the language “the bight” in line 2 should be “a bight.”

Claim 3 has been amended to change the language “the bight portion” to “the bight” to provide proper antecedent basis. Claim 5 has been amended to remove the language “the bight” from the claim. Claim 16 has been amended to remove the language “a recesses” from the claim. Claim 17 depends from claim 16, which is now considered to be in condition for allowance. In view of these amendments, removal of the objection to claims 3, 5, 16, and 17 is respectfully requested.

4. The Examiner has rejected claim 1 under 35 U.S.C. 102(b) as being anticipated by Hsiao et al. (US Patent No. 6,142,810).

With regard to claim 1, the Examiner stated that Hsiao et al. discloses a terminal 3 for use with a socket. The terminal 3 comprises a pin engaging portion 311, 313 having a pair of contact arms 312 positioned to make electrical engagement with a mating pin 5. A retention portion 32 extends from the pin engaging portion 311, 313. Side edges 321 of the retention portion 32 are dimensioned to create a frictional interference with a side wall of a cavity of the socket. A mounting portion (area defined by the lower surface of 32, 34) extends from the retention portion 32 in an opposite direction from the pin engaging portion 311, 313. The mounting portion has at least one resilient leg (between 32, 34) which extends from the retention portion 32 to a solder pad 34 soldered to a substrate. The solder pad 34 is spaced from the retention portion 32 a sufficient distance to allow the at least one resilient leg to provide the resilient characteristics required to allow the at least one resilient leg to resiliently compensate from misalignment or movement of the solder relative to the solder pad. The Examiner, therefore, concluded that Hsiao et al. teaches all the elements of claim 1.

Claim 1 has been amended to clarify that which Applicants regard as the invention and to include the claim limitations of dependent claim 7, which has been indicated as having allowable subject matter, and intervening claim 6. Claims 6 and 7 have been cancelled. Specifically, claim 1 has been amended to state that the terminal comprises mounting portion having two resilient legs that are separated by an opening, the opening extending from proximate the retention portion to a bridge which extends between the two resilient legs, and the mounting portion having an end which is configured to be soldered to a substrate. As indicated by the Examiner, Hsiao et al. does not teach a mounting portion having two resilient legs which extend from the retention portion wherein the two resilient legs are separated by an opening, the opening extending from proximate the retention portion to a bridge which extends between the two resilient legs. Because Hsiao et al. does not teach all the elements of amended claim 1, removal of the rejection of claim 1 under 35 U.S.C. 102(b) is respectfully requested.

5. The Examiner has rejected claims 1-4, 6, 8-12, 14, and 18-19 under 35 U.S.C. 103(a) as being unpatentable over Lemke et al. (US Patent No. 6,443,750 B1) in view of Hsiao et al. (US Patent No. 6,142,810).

With regard to claims 1 and 18, the Examiner stated that Lemke et al. discloses a terminal (shown in Attachment 1) for use with a socket. The terminal 1 comprises a pin engaging portion 345, 343 having a pair of contact arms A1, A2 which are positioned to make electrical engagement with a mating pin P. A retention portion 347 extends from the pin engaging portion 345, 343. Side edges B of the retention portion 347 are dimensioned to create a frictional interference with a side wall of a cavity of the socket. A mounting portion 357 extends from the retention portion 347 in an opposite direction from the pin engaging portion 345, 343. Lemke et

al. does not teach an extension, which extends from the retention portion to a solder pad. Hsiao et al., however, teaches a mounting portion (area defined by the lower surface of 32, 34) having at least one resilient leg (between 32, 34) which extends from a retention portion 32 to a solder pad 34 that is soldered to a substrate. The solder pad 34 is spaced from the retention portion 32 a sufficient distance to allow the at least one resilient leg to provide the resilient characteristics required to allow the at least one resilient leg to resiliently compensate for misalignment or movement of the solder relative to the solder pad. The Examiner, therefore, concluded that it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the resilient leg of Lemke et al. with a mounting portion that extends from the retention portion to a solder pad as taught by Hsiao et al. for adjusting the misalignment and/or movement of the terminal relative to the attached solder pad.

With regard to claim 11, the Examiner further stated that Lemke et al. discloses a terminal wherein the first contact arm A1 has a reduced thickness T1 compared to a thickness T2 of the second contact arm A2 whereby the first contact arm A1 is configured to have a matched inductance to the second contact arm A2.

As previously discussed, claim 1 has been amended to include the claim limitations of dependent claim 7, which has been indicated as having allowable subject matter, and intervening claim 6. Claims 6 and 7 have been cancelled. As indicated by the Examiner, neither Lemke et al. nor Hsiao et al. teach or suggest a mounting portion having two resilient legs which extend from the retention portion wherein the two resilient legs are separated by an opening, the opening extending from proximate the retention portion to a bridge which extends between the two resilient legs. Because the combination of Lemke et al. in view of Hsiao et al. does not teach or

suggest all the elements of amended claim 1, removal of the rejection of claim 1 under 35 U.S.C. 103(a) is respectfully requested.

Claims 2-4, 6, and 8-10 depend from independent claim 1. Claims 6 and 9 have been cancelled. As previously discussed, the combination of Lemke et al. in view of Hsiao et al. fails to teach or suggest all the elements of amended claim 1. Because the combination of Lemke et al. in view of Hsiao et al. fails to teach or suggest all the elements of amended claim 1, the combination of Lemke et al. in view of Hsiao et al. fails to teach or suggest all the elements of claims 2-4, 8, and 10. Removal of the rejection of claims 2-4, 8, and 10 under 35 U.S.C. 103(a) is respectfully requested.

Claim 11 states that the terminal comprises a pin engaging portion having a pair of non-symmetrical contact arms which are positioned to make electrical engagement with a mating pin, a first contact arm of the pair of contact arms is configured to have a longer electrical path across which signals are transmitted than a second contact arm, the first contact arm has a reduced thickness compared to the second contact arm, whereby the first contact arm is configured to have a matched inductance to the second contact arm. Hsiao et al. teaches a terminal 3 having an engaging portion 31 with a pair of cantilevers 311 symmetrically extending therefrom. Lemke et al. teaches a contact 303 having dual beams 343, 345 extending from an end of a base section 347. As taught in column 7, lines 44-49 of Lemke et al., the beam 343 is shorter than the beam 345. In order to balance the spring rates of the beams 343, 345, the width of the longer beam 345 can be greater than the width of the shorter beam 343. Thus, although a corner portion of the longer beam 345 appears to have a smaller thickness than the shorter beam 343 in Figure 7b, which is the Figure shown in the Examiner's Attachment 1, it is clear from Figure 7a and column 7, lines 44-49 of Lemke et al. that the corner portion is merely bent out of the plane in Figure 7b

causing the corner portion to have the appearance of a reduced thickness. Lemke et al., therefore, teaches the exact opposite of the claimed invention. Lemke et al. teaches a first beam 345 with a longer length and greater width than a second beam 343, while the claimed invention teaches a first contact arm with a longer electrical path and reduced thickness compared to a second contact arm. Thus, the configuration of Lemke et al. merely balances the spring rates of the beams 343, 345, while the configuration of the claimed invention allows inductance to be matched between each arm even though the distance the signal must travel in the arms is divergent. Because neither Lemke et al. nor Hsiao et al. teaches a first contact arm having a longer electrical path than a second contact arm wherein the first contact arm has a reduced thickness compared to the second contact arm, the combination of Lemke et al. in view of Hsiao et al. does not teach or suggest all the elements of claim 11. The Examiner, therefore, has failed to set forth a prima facie case of obviousness and removal of the rejection of claim 11 under 35 U.S.C. 103(a) is respectfully requested.

Claims 12, 14, and 18-19 depend from independent claim 11. As previously discussed, the combination of Lemke et al. in view of Hsiao et al. does not teach or suggest all the elements of claim 11. Because the combination of Lemke et al. in view of Hsiao et al. does not teach or suggest all the elements of claim 11, the combination of Lemke et al. in view of Hsiao et al. does not teach or suggest all the elements of claims 12, 14, and 18-19. Because the Examiner failed to set forth a prima facie case of obviousness, removal of the rejection of claims 12, 14, and 18-19 under 35 U.S.C. 103(a) is respectfully requested.

In view of the amendments and arguments presented herein, the application is considered to be in condition for allowance. Reconsideration and passage to issue is respectfully requested.

Please charge any additional fees associated with this application to Deposit Order

Account No. 501581.

Respectfully submitted,

Whyne et al., Applicants

A handwritten signature in cursive script, appearing to read "J M Slonaker", written over a horizontal line.

Jennifer M. Slonaker

Registration No. 50568

Attorney for Applicants

Phone: 717.399.1535

Facsimile: 717.291.4660